

## Abstract

It relates to an energy meter device with two inputs (1,2), where to signals are fed in,  
which depend on electrical voltage (V) and an electrical current (I). These are digitized in  
5 analog/digital transformers (3,4) and linked to one another. A phase evaluation block (9) is  
coupled with outputs of the analog/digital transformers for the correction of phase  
deviations, which can be caused by means of coupling the signals (14,16). Phase  
10 evaluation block (9) controls a phase correction block (6) at the output of an analog/digital  
transformer (4). The phase evaluation can take place in digital signal processing. As a  
result, a cost-favorable compensation of phase errors is possible with limited expenditure,  
so that a galvanic isolation is possible at the input when avoiding measurement errors. The  
15 described energy meter device is particularly suitable for the implementation in integrated  
circuitry.

Figure